February 6, 2023

Ann E. Misback
Secretary
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue NW
Washington, DC 20551

Re: Principles for Climate-Related Financial Risk Management for Large Financial Institutions [Docket No. OP-1793]

Submitted via regs.comments@federalreserve.gov

Dear Ms. Misback:

I am pleased to provide these comments regarding the "Principles for Climate-Related Financial Risk Management for Large Financial Institutions."[1]

This politically motivated notice and proposed statement of principles is inconsistent with the Board's statutory mission.[2] One will search in vain for any Congressional declaration that the Board's mission includes climate change or environmental regulation. Entering into a new regulatory field not authorized by Congress is particularly problematic in light of the Supreme Court's ruling in *West Virginia vs. Environmental Protection Agency*.[3] The Board's effort to recast what is essentially environmental regulation as financial regulation will not, in all likelihood, save the attempt by the Board to expand its remit to include environmental regulation. The Board should not go down this path.

This notice is also demonstrative of the Board's *de facto* lack of independence.[4] It shows that the Board is increasingly politicized, following the lead of the White House[5] and the Financial Stability Oversight Council (FSOC)[6] rather than exercising independent judgement and discharging its actual mission.

The proposed statement of principles is also simply bad policy. The statement of principles rests on the idea that the risk from climate change is so different from other types of risks, both in terms of its nature and magnitude, that climate change requires a separate set of principles,

[1] "Principles for Climate-Related Financial Risk Management for Large Financial Institutions," The Board of Governors of the Federal Reserve System, Notice and Request for Comment, *Federal Register*, Vol. 87, No. 235, December 8, 2022, pp. 75267-75271 https://www.govinfo.gov/content/pkg/FR-2022-12-08/pdf/2022-26648.pdf.
[2] Throughout this letter, I use the term 'Board' to mean the Board of Governors of the Federal Reserve System.
[3] 597 U.S. ___ (2022) https://www.supremecourt.gov/opinions/21pdf/20-1530_n758.pdf.
[4] See 12 U.S. Code § 250.
[5] "Tackling the Climate Crisis at Home and Abroad," January 27, 2021, Executive Order 14008, https://www.govinfo.gov/content/pkg/FR-2021-02-01/pdf/2021-02177.pdf; "Climate-Related Financial Risk," May 20, 2021, Executive Order 14030 https://www.govinfo.gov/content/pkg/FR-2021-05-25/pdf/2021-11168.pdf.
[6] "Report on Climate-Related Financial Risk," Financial Stability Oversight Council, 2021 https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf.

separate governance, separate procedures and separate safety and soundness examinations of banks. This is simply inconsistent with reality.

The following "systemic" or economy-wide risks pose a far greater risk to banks and the stability of the financial system than does climate change (probably by an order of magnitude or more):

- The financial, economic, supply chain and physical risks associated with the ongoing major war in Europe (over Ukraine) and potential broader wars between great powers in Europe and Asia (over Taiwan);
- Asset price inflation (i.e. a financial market and real property 'bubble') created by Federal Reserve monetary policy;
- Goods and service price inflation created by Federal Reserve monetary policy;
- Irresponsible and unsustainable Congressional fiscal policy;[7]
- The entitlement crisis;[8] and
- The Executive Branch regulatory Tsunami that will harm productivity growth and real wages for years to come.

There are no *Federal Register* notices – with Statement of Principles or contemplated rule-makings – regarding these risks. The Board remains silent regarding these risks even though they pose greater risk to the financial system. That the Board is considering prioritizing the highly uncertain, contingent and distant risks associated with climate change over these very real, very large and very immediate risks shows that it is considering placing the financial system at risk in furtherance of progressive political aims. This, the Board should not do.

The "Statement of Principles" is effectively a rule-making since it will be used to govern the bank examination process.[9] There are at least 11 major issues that the Board should consider as it weighs potential regulations governing climate-related financial risk.

[7] *The 2022 Long-Term Budget Outlook*, Congressional Budget Office, July 2022 https://www.cbo.gov/publication/58340. Trends that can't go on forever, won't. The debt crisis that will eventually happen in the absence of very major policy changes will have an unequaled deleterious impact on the financial system and on banks.

[8] Social Security and Medicare alone have unfunded liabilities of approximately $20.5 trillion and $52.6 trillion, respectively. See "The 2022 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds," June 2, 2022 Table IV.B6, p. 75 https://www.ssa.gov/OACT/TR/2022/tr2022.pdf; "2022 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds," June 2, 2022 Table V.F2 p. 208 https://www.cms.gov/files/document/2022-medicare-trustees-report.pdf. Imagine what the inflation rate, economic dislocation and heightened risk would be if even a fraction of these liabilities are monetized. This is, of course, in addition to the $24.6 trillion national debt owed to the public. See "Fiscal Data" https://fiscaldata.treasury.gov/datasets/debt-to-the-penny/debt-to-the-penny.

[9] The Statement of Principles is obviously not compliant with the Administrative Procedure Act and the manifold other requirement related to rule-makings. It is highly doubtful that the Board will be able to evade this requirements in the final analysis.

1. <u>Most Climate Regulation is Beyond the Board's Mission and its Statutory Charge. The Breadth of the Board's 'Statement of Principles' is subject to Judicial Review.</u>

Section 2A [12 U.S. Code § 225a] provides:

> The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

This is because the Federal Reserve is, first and foremost, a central bank. It is also a bank regulator but it is not an environmental regulator. One can peruse the Federal Reserve Act[10] indefinitely and there is nowhere to be found Congressional authorization for the Federal Reserve to regulate the environment.

In *West Virginia v. EPA*, the Supreme Court held that an agency must act pursuant to clear delegation of authority from Congress. In holding an exercise of regulatory power by the EPA invalid, the court wrote:

> Extraordinary grants of regulatory authority are rarely accomplished through "modest words," "vague terms," or "subtle device[s]." Nor does Congress typically use oblique or elliptical language to empower an agency to make a "radical or fundamental change" to a statutory scheme.[11]

This is an affirmation of a line of cases that the Board needs to keep in mind. It cannot go too far down the climate change, environmental regulation path without considering limits on its statutory authority. Otherwise, its Statement of Principles (really a proposed rule to be used for enforcement and examination purposes) will be successfully challenged in court. Climate change regulation with the objective of altering the climate is not part of the Federal Reserve's remit.

In *FDA v. Brown & Williamson Tobacco Corp.*, the Supreme Court, granting *Chevron* deference to the agency, found that the Food and Drug Administration did not have authority to regulate tobacco.

> In determining whether Congress has specifically addressed the question at issue, a reviewing court should not confine itself to examining a particular statutory provision in isolation. The meaning - or ambiguity - of certain words or phrases may only become evident when placed in context. It is a "fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." A court must therefore interpret the statute "as a symmetrical and coherent regulatory scheme," and "fit, if possible, all parts into an harmonious whole." Similarly, the meaning of one statute

[10] 12 U.S. Code 221 et seq. See also "Federal Reserve Act" https://www.govinfo.gov/content/pkg/COMPS-270/pdf/COMPS-270.pdf. See especially 12 U.S. Code §248 (relating to enumerated powers).

[11] Slip Opinion at p. 18.

> may be affected by other Acts, particularly where Congress has spoken subsequently and more specifically to the topic at hand. In addition, we must be guided to a degree by common sense as to the manner in which Congress is likely to delegate a policy decision of such economic and political magnitude to an administrative agency.[12] (citations omitted)

If the rule or "statement of principles" used for enforcement purposes ultimately proposed by the Board is of great "economic and political magnitude," then it is likely to be ruled invalid since there is no authority for such a climate rule or "statement of principles" in the statute.

The *FDA v. Brown & Williamson Tobacco Corp.*, the court also wrote that:

> By no means do we question the seriousness of the problem that the FDA has sought to address. The agency has amply demonstrated that tobacco use, particularly among children and adolescents, poses perhaps the single most significant threat to public health in the United States. Nonetheless, no matter how "important, conspicuous, and controversial" the issue, and regardless of how likely the public is to hold the Executive Branch politically accountable, an administrative agency's power to regulate in the public interest must always be grounded in a valid grant of authority from Congress. And "[i]n our anxiety to effectuate the congressional purpose of protecting the public, we must take care not to extend the scope of the statute beyond the point where Congress indicated it would stop."[13] (citations omitted)

Thus, a court can accept the importance of climate change and even accept the much more questionable proposition that a proposed rule or statement of principles used for enforcement purposes would have climate change mitigation or other benefits that exceed its costs and yet it still must find that the Federal Reserve Act does not authorize the Board to regulate in the proposed manner.

Similarly, in *NAACP v. FPC*, 425 U.S. 662 (1976) the Supreme Court held that the Federal Power Board did not have the authority to prohibit discriminatory employment practices.

> The parties point to nothing in the Acts or their legislative histories to indicate that the elimination of employment discrimination was one of the purposes that Congress had in mind when it enacted this legislation. The use of the words "public interest" in the Gas and Power Acts is not a directive to the Board to seek to eradicate discrimination, but, rather, is a charge to promote the orderly production of plentiful supplies of electric energy and natural gas at just and reasonable rates. … The Federal Power Board is authorized to consider the consequences of discriminatory employment practices on the part of its regulatees only insofar as such consequences are directly related to the Board's establishment of just and reasonable rates in the public interest."[14]

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[12] *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132-133 (2000).
[13] *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 161 (2000).
[14] *NAACP v. FPC*, 425 U.S. 662, 670-671 (1976).

In *NFIB v. OSHA*,[15] the Supreme Court granted a stay enjoining OSHA from imposing vaccine mandates on employees because OSHA does not have the authority to do so under its authorizing statute.

> Why does the major questions doctrine matter? It ensures that the national government's power to make the laws that govern us remains where Article I of the Constitution says it belongs—with the people's elected representatives. If administrative agencies seek to regulate the daily lives and liberties of millions of Americans, the doctrine says, they must at least be able to trace that power to a clear grant of authority from Congress.[16]

Material risks that would actually effect a bank's safety and soundness must be considered under current rules. The real purpose of the statement of principles, however, is to further the Biden administration climate agenda as outlined in the referenced Executive Orders and the cited FSOC report.[17] The notion that climate-related risk is either more important or so different in kind from other risks that it requires a banking regulator to provide special guidance while ignoring many other larger risks is simply not credible. This is environmental regulation masquerading as financial regulation, and everyone knows it. The primary impact of the statement of principles will not be to improve the safety and soundness of banks nor to mitigate climate change, but to enrich the climate-industrial complex – the bevy of lawyers, accountants, consultants and NGOs that live off of climate change complexity.

2. Economic Analysis of Climate-Related Financial Risk is Nearly Non-Existent

Serious economic analysis of climate-related financial risk is nearly non-existent. For example, you would think that the SEC, in its proposed rule-making,[18] would have included such an analysis in detail in its proposing release since it is the factual predicate for their rulemaking. There are a few citations to a few studies. But those studies are largely advocacy pieces by those with a political agenda.

Any estimate of the economic impact of climate change will have to rely on the highly uncertain and divergent climate model results. Economics models are more uncertain because of necessity they are built on top of the climate models. So if the climate models have a band of results plus or minus X percent, the economics models will have a band of results that is greater than plus or minus X percent.

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[15] *NFIB v. OSHA,* 595 U. S. ____ (2022) https://www.supremecourt.gov/opinions/21pdf/21a244_hgci.pdf.
[16] Op. Cit., p. 4.
[17] The statement of principles borrows heavily from the FSOC report and "Climate-Related Financial Risk," May 20, 2021, Executive Order 14030 https://www.govinfo.gov/content/pkg/FR-2021-05-25/pdf/2021-11168.pdf. See also EO 14060 at section 5(d) which states that EO 14030 is implementing section 211 of Executive Order 14008 of January 27, 2021 (Tackling the Climate Crisis at Home and Abroad), the general climate change agenda Executive Order.
[18] "The Enhancement and Standardization of Climate-Related Disclosures for Investors," Securities and Exchange Commission, Proposed Rule, *Federal Register*, Vol. 87, No. 69, April 11, 2022, pp. 21334-21473 https://www.govinfo.gov/content/pkg/FR-2022-04-11/pdf/2022-06342.pdf. See also the SEC version of the proposing release, March 21, 2022 https://www.sec.gov/rules/proposed/2022/33-11042.pdf (506 pages).

In addition to the high degree of uncertainty in the climate models will be added an entirely new family of economic ambiguity and uncertainty. Any economic estimate of the impact of climate change will also have to choose a discount rate to arrive at the present discounted value of future costs and benefits[19] of climate change and to estimate the future costs and benefits of various regulatory or private initiatives. The choice of discount rate is controversial and important.[20] Estimates will need to be made of the cost of various aspects of climate change (sea level rises, the impact on agriculture, etc). Estimates will need to be made of the cost of various remediation techniques. Guesses will need to be made about the rate of technological change. Guesses will need to be made about the regulatory, tax and other responses of a myriad of governments.[21] Estimates will need to be made using conventional economic techniques regarding the economic impact of those changes which, in turn, will reflect a wide variety of techniques and in many cases a thin or non-existent empirical literature. Guesses will need to be made of market responses to all of these changes since market participants will not stand idly by and do nothing as markets, technology and the regulatory environment change.

The results of any given model will depend on what assumptions or guesses the modeler makes regarding these many highly uncertain issues. The SEC, in its proposed rule, provides literally no guidance on these issues. Perhaps the Federal Reserve can do better. Certainly, the "Statement of Principles" as written does not.

3. No Federal Reserve Rule Can Have a Meaningful Impact on Climate

Any Federal Reserve proposed rule would have somewhere between either a vanishingly small or no effect on actual greenhouse gas emissions or climate change. *Entirely eliminating* net U.S. emission would reduce global temperatures by only 0.2 Celsius by 2100. [22] Thus, as a practical matter, any Federal Reserve rules would have no measurable impact on global warming. Period. Full stop.

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[19] There are some benefits. For example, large portions of Northern areas such as Canada, Russia and Scandinavia would presumably become suitable for agriculture and growing seasons in the norther United States would lengthen. Carbon dioxide promotes plant growth. Deaths from cold weather (which are more numerous than those from hot weather) will decline.

[20] See, for example, David Kreutzer, "Discounting Climate Costs," Heritage Foundation Issue Brief No. 4575, June 16, 2016 http://thf-reports.s3.amazonaws.com/2016/IB4575.pdf; Kevin Dayaratna, "An Analysis of the Obama Administration's Social Cost of Carbon," Testimony before Committee on Natural Resources, United States House of Representatives on July 23, 2015 https://www.heritage.org/testimony/analysis-the-obama-administrations-social-cost-carbon.

[21] To get a sense of how daunting a task it is to keep track of the many government policy responses, see "Climate Change Laws of the World," Grantham Research Institute on Climate Change and the Environment at LSE https://climate-laws.org/. Merely keeping track of these many rules is one thing. Accurately predicting how they will change introduces an entirely new level of complexity and uncertainty.

[22] Kevin D. Dayaratna, Katie Tubb, and David Kreutzer, "The Unsustainable Costs of President Biden's Climate Agenda," Heritage Foundation Backgrounder No. 3713, June 16, 2022 https://www.heritage.org/sites/default/files/2022-06/BG3713_0.pdf ("eliminating all U.S. emissions would reduce global temperatures by less than 0.2 degrees Celsius by 2100." This result is obtained using a clone of the National Energy Model System 2021 Full Release (NEMS) used by the Energy Information Administration (EIA) in the Department of Energy.). See also Comment Letter of Benjamin Zycher, American Enterprise Institute to the Securities and Exchange Board regarding "The Enhancement and Standardization of Climate-Related Disclosures for Investors," June 17, 2022 https://www.sec.gov/comments/s7-10-22/s71022-20132286-302818.pdf.

Moreover, lengthy risk scenario analyses full of amorphous, legally scrubbed language based on highly doubtful climate and economics models presented on Federal Reserve forms or to bank examiners are not going to have a significant impact on emissions. Employing large number of accountants, economists, lawyers and consultants to make guesses about the impact of climate change is unlikely to materially affect either the health of banks, the stability of the financial system or the climate.

4. The Costs and Adverse Economic Impact on Regulated Entities, Competition and the Economy Must be Seriously Considered

The cost of implementing the "Statement of Principles" is likely to be substantial. The costs that would be imposed by the SEC's proposed climate change rule, using their own figures, would *triple* the cost of being a public company and have a host of adverse economic effects.[23] This figure has since been revised upwards by the SEC staff.[24] Assuming that the SEC is not going to allow issuers to fabricate data out of whole cloth, the scope 3 requirements in the SEC proposed rule will also affect many millions of small businesses that are not issuers as well. The SEC utterly failed to consider that.[25]

The Board needs to seriously consider the costs it would be imposing on regulated entities, the adverse impact that these costs would have on competition and the costs to consumers of banking services. The Federal Reserve does not appear to have even begun to consider the costs of its proposal. This is arbitrary and capricious. It is deeply irresponsible.

5. Virtually Any Federal Reserve Rule Would Fail a Cost-Benefit Analysis

Because the impact on climate change will be negligible (and certainly not measurable) and the costs substantial, virtually any Federal Reserve rule (or statement of principles used for enforcement purposes) is likely to fail a serious cost benefit analysis. Even zeroing out U.S. net emissions will reduce global temperatures by only 0.2 degrees Celsius over the next 80 years. And no Federal Reserve rule or practice is going to make a major difference. The analysis of "risk" contemplated by the proposed statement of principles is likely to be arbitrary and largely without factual predicate. Paying consultants to guess based on proprietary models is not going to improve financial regulation.

6. The Federal Reserve Lacks the Climate Expertise to Craft and Enforce a Climate Rule

The Board has no expertise regarding climate science. Yet the proposition that climate change represents an enormous, extraordinary and special kind of risk that justifies imposing massive costs

[23] Comment Letter of David R. Burton, Heritage Foundation to the Securities and Exchange Board regarding "The Enhancement and Standardization of Climate-Related Disclosures for Investors," June 17, 2022 https://www.sec.gov/comments/s7-10-22/s71022-20131980-302443.pdf.

[24] See Commissioner Mar Uyeda, "Remarks at the 2022 Cato Summit on Financial Regulation," November 17, 2022 https://www.sec.gov/news/speech/uyeda-remarks-cato-summit-financial-regulation-111722.

[25] Ibid.

on regulated firms is the analytical predicate for the "statement of principles." If the risk from climate change is material and determinable, banks must already take that risk into account.

The Board does not have the expertise or administrative ability to assess the veracity, or lack thereof, of any bank-specific speculation regarding climate-related risk based on highly divergent and uncertain economic models projecting the economic impact of climate change. Climate models show massive variations in projections and show wide divergence in the ability of models to account for past warming and the degree of warming that is anthropogenic. Any Federal Reserve rule governing examination practice is going to have to address climate modeling issues and the Board will have to provide guidance about how to do so.

I am no climate science expert. Nor, I suspect, is anyone at the Board since climate science is way outside of the Board's lane. Certainly nothing in the statement of principles indicates anyone at the Board possesses scientific expertise.

I do know a thing or two about modeling in an economics context. Models are typically highly dependent on a few relationships specified in their equations and parameters. A small number of assumptions about relationships and parameters drive results. For example, a model examining the impact of proposed tax policy might adopt a neoclassical view where the impact of the proposed tax changes on the user cost of capital and labor response are central (as specified in the equations) and the empirical parameters (as specified in the elasticities) governing investment and labor are key.[26] Seemingly small adjustments to elasticities (even though within the bounds established in the empirical literature) result is significantly different results. A Keynesian "macroeconomic" approach focusing on aggregate demand would yield dramatically different results, operate on different principles and lead to different policy recommendations. And so on.

Climate modeling is, in principle, no different. A small number of equations and empirical parameters drive results. Even the conventional governmental source -- the Intergovernmental Panel on Climate Change – shows massive variations in projections and shows the wide divergence in the ability of models to account for past warming[27] and the degree of warming that is anthropogenic.[28] The worst-case concentration pathway, for example, assumes highly unlikely

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[26] Parker Sheppard and David Burton, "How the GOP Tax Bill Will Affect the Economy," *Daily Signal*, November 17, 2017 https://www.dailysignal.com/2017/11/17/gop-tax-bill-will-affect-economy/. In this case, we used the Hall-Jorgenson user cost of capital equation, the Cobb-Douglas production function and conventional price theoretic labor market modeling.

[27] See, for instance, Byron A. Steinman, Michael E. Mann and Sonya K. Miller, "Atlantic and Pacific Multidecadal Oscillations and Northern Hemisphere Temperatures," *Science*, February 27, 2015, Vol. 347, Issue 6225, pp 988-991, https://science.sciencemag.org/content/347/6225/988#aff-1 and Joseph Majkut, "Climbing the Staircase of Global Warming," Niskanen Center, July 27, 2016, https://www.niskanencenter.org/climbing-staircase-global-warming/ .

[28] *Climate Change 2014 Synthesis Report*, Intergovernmental Panel on Climate Change https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf See, for example, "The Representative Concentration Pathways," (p. 57); "Box 2.3, Models and Methods for Estimating Climate Change Risks, Vulnerability and Impacts," (pp. 58-59); "Table 2.1, Projected Change in Global Mean Surface Temperature and Global Mean Sea Level Rise for the Mid- and Late 21st Century, Relative to the 1986–2005 Period," (p. 60); "Cumulative Total Anthropogenic CO2 Emissions from 1870 (GtCO2)," (p. 63); "Table 2.2, "Cumulative Carbon Dioxide (CO2) Emission Consistent with Limiting Warming to Less than Stated Temperature Limits at Different

projections of coal use, high population growth, low economic growth and slow technological progress.[29] Using the worst-case scenario of these emissions concentration pathways as the business-as-usual scenario will mislead the private sector, policymakers, regulators and the public on the estimated climate impacts and costs.[30]

Once you broaden your reading to include those that do not have a financial or political interest in climate change alarmism, it becomes clear that the variance and uncertainty in climate modeling is even higher than the IPCC report indicates.[31] It is clear that various models yield dramatically different results. Explaining the details is beyond the scope of this letter and my current competence. It is also beyond the ability of Federal Reserve.

To draft and enforce a major climate change statement of principles to be used for bank examination purposes will of necessity require a substantial percentage of the Federal Reserve staff and degrade the ability of the Federal Reserve to accomplish its core mission. That is most assuredly not in the public interest. The very substantial resources necessary to develop even a moderate degree of expertise on climate models and the economic and risk models based on them would be much better spent furthering the Federal Reserves' actual mission.

7. The Federal Reserve should be as Skeptical of the Climate Lobby as It Would be of any Other Lobby.

Politics should be stripped of its romance. The climate-industrial complex is a big business. Notwithstanding its daily protestations, the climate lobby acts in its own interest not the public interest. The SEC, for example, in its proposing release, Paperwork Reduction Act Table 4, estimates that $6.4 billion annually will flow to the economists, accountants, attorneys,

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Levels of Probability, Based on Different Lines of Evidence," (p. 64). The updated sixth version of the Synthesis Report is due for release in the Fall of 2022.

[29] Justin Ritchie and Hadi Dowlatabadi, "Why Do Climate Change Scenarios Return to Coal?" *Energy*, December 2017, Vol. 140, Part 1, pp 1276-1291, https://www.sciencedirect.com/science/article/abs/pii/S0360544217314597.

[30] Pielke, Roger and Ritchie, Justin, "Systemic Misuse of Scenarios in Climate Research and Assessment," April 21, 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3581777.

[31] Steven E. Koonin, *Unsettled: What Climate Science Tells Us, What It Doesn't, and Why It Matters*, Chapter 4, "Many Muddled Models," (Dallas, TX: BenBella Books, 2021); Bjorn Lomborg, *False Alarm: How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet*, (New York: Basic Books, 2020); Pat Michaels and Chip Knappenberger, *Lukewarming: The New Climate Science that Changes Everything*, (Washington: Cato Institute, 2016); Benjamin Zycher, Resident Scholar, American Enterprise Institute, Statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Hearing on the "21st Century Economy: Protecting the Financial System from Risks Associated with Climate Change" March 18, 2021 https://www.banking.senate.gov/imo/media/doc/Zycher%20Testimony%203-18-21.pdf; Kevin Dayaratna, Ross McKitrick and David Kreutzer, "Empirically Constrained Climate Sensitivity and the Social Cost of Carbon," *Climate Change Economics*, Vol. 8, No. 2, 2017, pp. 1-12 https://econpapers.repec.org/article/wsiccexxx/v_3a08_3ay_3a2017_3ai_3a02_3an_3as2010007817500063.htm; Ross McKitrick and John Christy, "A Test of the Tropical 200- to 300-hPa Warming Rate in Climate Models," *Earth and Space Science*, September 2018, https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018EA000401; Roger Pielke and Justin Ritchie, "How Climate Scenarios Lost Touch With Reality," *Issues in Science and Technology*, Summer 2021, https://issues.org/climate-change-scenarios-lost-touch-reality-pielke-ritchie/; Zeke Hausfather , Kate Marvel , Gavin A. Schmidt , John W. Nielsen-Gammon and Mark Zelinka, "Climate Simulations: Recognize the 'Hot Model' Problem," *Nature* https://www.nature.com/articles/d41586-022-01192-2.

compliance officers, consultants, "GHG emissions attestation providers" and NGOs that will live off of the SEC's proposed rule.[32] That is a lot of money, particularly from one rule. Once the rules being considered by other financial regulators are considered, including the Federal Reserve, it will be a multiple of that amount. European Union rules are a source of still more money. These actors are a potent lobby for adopting climate-related rules because they profit to the tune of billions of dollars from the adoption of these rules. The Board should be under no illusion about what is going on here. Financial regulation is a profit center for the climate lobby.

8. Banking Laws are a Poor Mechanism to Address Externalities

The economic justification for climate change regulations is that they are designed to address a negative externality. An externality is (1) a cost that is imposed on (negative externality) or (2) a benefit accorded to (positive externality) someone that is not a party to a transaction or not engaged in an action. There are countless positive and negative externalities all around us. Air pollution is a typical example of a negative externality.

There are many ways to address negative externalities. Improved property rights,[33] tort law,[34] regulation,[35] or a tax equal to the cost involuntarily imposed by the economic actor creating the externality on those "external" to the transaction.[36] A tax subsidy for politically favored interests with strong lobbies would be fairly far down the list of efficacious means of addressing the problem of negative externalities but there are many provisions in the Internal Revenue Code with this purpose. To achieve the desired effect, the policy designed to address the externality must be calibrated to accurately internalize the actual cost of the externality. This requires estimating the costs imposed by the externality and imposing costs in an equal and off-setting amount on the economic actor in question. Detailed scientific, cost and market information must be obtained to get this even close to right.[37]

Trying to achieve this result through the Federal Reserve Act is comparable to trying to score in basketball by bouncing the ball off the floor and then the backboard. It is theoretically possible, but there is a vanishingly small chance that it will achieve the desired result. And any team that tried that on a regular basis would lose. Similarly, banking laws are not the place to do environmental regulation.

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[32] See PRA Table 4 at p. 21461 of "The Enhancement and Standardization of Climate-Related Disclosures for Investors," Securities and Exchange Board, Proposed Rule, Federal Register, Vol. 87, No. 69, April 11, 2022, pp. 21334-21473 https://www.govinfo.gov/content/pkg/FR-2022-04-11/pdf/2022-06342.pdf.

[33] In the case of air and water that are usually unowned resources, this is problematic. In other cases, this can be the solution, although transactions costs can impede a private solution. See Ronald H.Coase, "The Problem of Social Cost," *Journal of Law and Economics*, Vol. 3, October, 1960, pp. 1–44.

[34] The common law of nuisance and various more modern environmental torts.

[35] Most notably by the Environmental Protection Agency and state analogs.

[36] This is commonly known as a Pigouvian tax. See Arthur Cecil Pigou, *The Economics of Welfare* (1920 and various later editions); "Pigouvian Taxes," *The Economist*, August 19, 2017 https://www.economist.com/news/economics-brief/21726709-what-do-when-interests-individuals-and-society-do-not-coincide-fourth.

[37] See David R. Burton, "Post Tax Reform Evaluation of Recently Expired Tax Provisions," Testimony before The Committee on Ways and Means, Subcommittee on Tax Policy, United States House of Representatives, March 14, 2018 https://www.heritage.org/testimony/post-tax-reform-evaluation-recently-expired-tax-provisions.

The United States does have an Environmental Protection Agency. Its mission is to police externalities. It already requires GHG emissions reporting.[38] The EPA estimates that the required reporting under their rule covers 85–90% of all GHG emissions from over 8,000 facilities in the United States.[39] Policing externalities directly using an agency that has actual expertise on the subject matter is much more efficacious than the banking law bank shot approach.

9. <u>Compelled Speech</u>

The Supreme Court has applied strict scrutiny to content-based laws. Compelled speech is generally unconstitutional.[40] While businesses, thankfully,[41] have First Amendment rights,[42] they are more limited than those of natural persons.

The Supreme Court noted in *National Institute of Family and Life Advocates v. Becerra* (2018)[43] that it

> … has afforded less protection for professional speech in two circumstances—neither of which turned on the fact that professionals were speaking. First, our precedents have applied more deferential review to some laws that require professionals to disclose ***factual, noncontroversial information*** in their "commercial speech. Second, under our precedents, States may regulate professional conduct, even though that conduct incidentally involves speech. (emphasis added) (citations omitted) [44]

The court continued:

> Outside of the two contexts discussed above — disclosures under Zauderer and professional conduct — this Court's precedents have long protected the First Amendment rights of professionals. … Professionals might have a host of good-

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[38] Greenhouse Gas Reporting Program (GHGRP) https://www.epa.gov/ghgreporting/ghgrp-reported-data.

[39] Proposing release at p. 21414.

[40] *West Virginia State Board of Education v. Barnette*, 319 U.S. 624 (1943) ("If there is any fixed star in our constitutional constellation, it is that no official, high or petty, can prescribe what shall be orthodox in politics, nationalism, religion, or other matters of opinion, or force citizens to confess by word or act their faith therein. If there are any circumstances which permit an exception, they do not now occur to us. We think the action of the local authorities in compelling the flag salute and pledge transcends constitutional limitations on their power, and invades the sphere of intellect and spirit which it is the purpose of the First Amendment to our Constitution to reserve from all official control.") 319 U. S. 624, 642 (1943).

[41] Since most of media are corporately owned, holding otherwise would eviscerate the First Amendment.

[42] See, e.g., *Citizens United v. Federal Election Board*, 558 U.S. 310 (2010) ("The Court has recognized that First Amendment protection extends to corporations."). See also the many cases cited therein.

[43] *National Institute of Family and Life Advocates v. Becerra*, 585 U.S. ___ (2018), 138 S. Ct. 2361; 201 L. Ed. 2d 835. See slip opinion at pp. 8-9 https://www.supremecourt.gov/opinions/17pdf/16-1140_5368.pdf.

[44] Citations omitted to *Zauderer v. Office of Disciplinary Counsel of Supreme Court of Ohio*, 471 U. S. 626, 651 (1985); *Milavetz, Gallop & Milavetz, P. A. v. United States*, 559 U. S. 229, 250 (2010); *Ohralik v. Ohio State Bar Assn.*, 436 U. S. 447, 455–456 (1978), *id.*, at 456; *Planned Parenthood of Southeastern Pa. v. Casey*, 505 U. S. 833, 884 (1992) (opinion of O'Connor, KENNEDY, and Souter, JJ.)."

> faith disagreements, both with each other and with the government, on many topics in their respective fields.[45]

For example, the DC Court of Appeals recently explicated what the term "controversial" means in the context of ruling the SEC conflict minerals rule unconstitutional. That analysis is on point and, in fact, directly mentions the question of global warming disclosures.

> One clue is that "uncontroversial," as a legal test, must mean something different than "purely factual." Hence, the statement in AMI we just quoted, describing "controversial in the sense that [the compelled speech] communicates a message that is controversial for some reason other than [a] dispute about simple factual accuracy." AMI, 760 F.3d at 27. Perhaps the distinction is between fact and opinion. But that line is often blurred, and it is far from clear that all opinions are controversial. Is Einstein's General Theory of Relativity fact or opinion, and should it be regarded as controversial? If the government required labels on all internal combustion engines stating that "USE OF THIS PRODUCT CONTRIBUTES TO GLOBAL WARMING" would that be fact or opinion? It is easy to convert many statements of opinion into assertions of fact simply by removing the words "in my opinion" or removing "in the opinion of many scientists" or removing "in the opinion of many experts."[46] (Capital letter emphasis in original)

> It [the conflict minerals rule] requires an issuer to tell consumers that its products are ethically tainted, even if they only indirectly finance armed groups. An issuer, including an issuer who condemns the atrocities of the Congo war in the strongest terms, may disagree with that assessment of its moral responsibility. And it may convey that `message' through `silence.' See Hurley, 515 U.S. at 573, 115 S.Ct. 2338. By compelling an issuer to confess blood on its hands, the statute interferes with that exercise of the freedom of speech under the First Amendment.[47]

The Board must avoid imposing requirements that constitute impermissible compelled speech.

10. Energy Independence

The Biden administration has taken a series of steps to impede conventional fuel production in the United States. We should be removing regulatory impediments to energy independence not creating them. To the extent that Federal Reserve statement of principles may make domestic energy production and distribution less attractive and more expensive by discouraging lending to conventional energy firms, they would be contrary to the interests of the American people.

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[45] *National Institute of Family and Life Advocates v. Becerra*, 585 U.S. ___ (2018). See slip opinion at pp. 11-12, 13 https://www.supremecourt.gov/opinions/17pdf/16-1140_5368.pdf.
[46] *National Association of Manufacturers v. S.E.C.*, 800 F.3d 518, 528 (D.C. Cir., 2015).
[47] Ibid. at p. 529.

11. The Social Costs of ESG

The broader social costs associated with ESG requirements (including climate change disclosure requirements, risk analysis, capital allocation requirements and so on) can, in principle, be quantified. This section provides an analytical framework that may be useful in analyzing the social welfare costs of ESG requirements.

To the extent ESG objectives are not pursued by businesses for the purpose of making a profit, $R > R_{ESG/CSR}$, where R is the rate of return on investment in the absence of ESG, CSR, sustainability requirements, diversity requirements, or stakeholder theory implementation, and $R_{ESG/CSR}$ is the rate of return after implementation of those requirements. The difference, $R - R_{ESG/CSR}$, is economically analogous to a tax. It is a reduction in return due to the pursuit of ESG objectives. Thus, $R - R_{ESG/CSR} = Tax_{ESG/CSR}$. This means that various techniques used in public finance to analyze the social welfare impact of taxes may be used to quantitatively analyze the social welfare cost of these provisions (i.e., $Tax_{ESG/CSR}$).

A tax has an excess burden or deadweight loss that can be calculated.[48] By introducing a wedge ($Tax_{ESG/CSR}$) between, in this case, the gross return and the net return, ESG/CSR reduces the size of the capital market and therefore output and employment. In a well-functioning market, the price of a capital asset should be equal to the present value of the expected future income stream generated by the asset net of taxes and depreciation.[49] Introducing a new tax (in this case $Tax_{ESG/CSR}$) would reduce the expected future income stream, and therefore, the price of the asset. It would also cause investment to flow out of the affected sector or jurisdiction.

Who bears the actual economic burden of the corporate income tax is an open question.[50] The analysis of who bears the burden of $Tax_{ESG/CSR}$ would be the same. One thing is certain: It cannot be corporations. A corporation is a legal fiction, and legal fictions do not pay taxes—people pay taxes. The corporate tax could be borne by corporate shareholders in the form of lower returns;[51]

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[48]Arnold C. Harberger, "The Incidence of the Corporation Income Tax," *Journal of Political Economy* (June 1962), pp. 215–240; Alan J. Auerbach and James R. Hines, "Taxation and Economic Efficiency," in Martin Feldstein and A. J. Auerbach, eds., *Handbook of Public Economics* (Amsterdam: North Holland, 2002); and John Creedy, "The Excess Burden of Taxation and Why It (Approximately) Quadruples When the Tax Rate Doubles," New Zealand Treasury *Working Paper* No. 03/29, December 2003, https://treasury.govt.nz/sites/default/files/2007-10/twp03-29.pdf. See also, for example, N. Gregory Mankiw, *Principles of Economics*, 4th ed. (Boston: Cengage Learning, 2006), chapter 8 (or many other textbooks on price theory, microeconomics, or principles of economics).

[49]See Robert E. Hall and Dale Jorgenson, "Tax Policy and Investment Behavior," *American Economic Review*, Vol. 57, No. 3 (June 1967), pp. 391–414. This section covers the basic user cost of capital analysis with taxes. See also Dale W. Jorgenson, *Investment: Capital Theory and Investment Behavior* (Cambridge, MA: MIT Press, 1996), and John Creedy and Norman Gemmell, "Taxation and the User Cost of Capital: An Introduction," New Zealand Treasury *Working Paper* No. 04/2015, March 2015, https://www.wgtn.ac.nz/cpf/publications/pdfs/2015-pubs/WP04_2015_Taxation-and-User-Cost.pdf.

[50]In the economics literature, this question is usually phrased as, "What is the incidence of the corporate income tax?"

[51]Government estimators are among the few who cling to the view that shareholders bear most of the burden. Joint Committee on Taxation, "Modeling the Distribution of Taxes on Business Income," JCX–14–13, October 16, 2013, https://www.jct.gov/publications.html?func=download&id=4528&chk=4528&no_html=1 (25 percent labor), and Julie Anne Cronin et al., "Distributing the Corporate Income Tax: Revised U.S. Treasury Methodology," *National Tax Journal*, March 2013, https://www.ntanet.org/NTJ/66/1/ntj-v66n01p239-62-distributing-corporate-income-tax.pdf (18 percent labor).

owners of all capital (again in the form of lower returns);[52] corporate customers in the form of higher prices;[53] or employees (in the form of lower wages).[54] It is, almost certainly, some combination of these.[55] The economics profession has changed its thinking on this issue several times over the past four decades, but the latest —and highly plausible —consensus is that workers probably bear *more than half* of the burden of the corporate income tax because capital is highly mobile.[56] Labor's share of the corporate tax burden is potentially as high as three-quarters.[57] Shareholders (investors) probably bear most of the remainder.[58] Initially (i.e., in the short run), the impact on shareholder returns would be greater. Adjustments take time. In the long run, ESG requirements ($Tax_{ESG/CSR}$) would have a disproportionately negative impact on labor due to capital factor mobility.

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[52]The non-corporate sector can be affected because competition will eventually cause wages, prices, and after-tax returns in the corporate *and* non-corporate sectors to be the same. For a more detailed explanation, see Arnold C. Harberger, "The Incidence of the Corporation Income Tax," *Journal of Political Economy*, Vol. 70, No. 3 (June 1962), pp. 215–240.

[53]The focus of the economics profession to date has been almost exclusively the impact on capital and labor rather than customers.

[54]Arnold C. Harberger, "The ABCs of Corporation Tax Incidence: Insights into the Open-Economy Case," in *Tax Policy and Economic Growth* (Washington, DC: American Council for Capital Formation, 1995); Arnold C. Harberger, "The Incidence of the Corporation Income Tax Revisited," *National Tax Journal*, Vol. 61, No. 2 (June 2008), pp. 303–312, http://www.ntanet.org/NTJ/61/2/ntj-v61n02p303-12-incidence-corporation-income-tax.pdf; Matthew H. Jensen and Aparna Mathur, "Corporate Tax Burden on Labor: Theory and Empirical Evidence," *Tax Notes*, June 6, 2011, https://www.aei.org/wp-content/uploads/2011/06/Tax-Notes-Mathur-Jensen-June-2011.pdf; Kevin A. Hassett and Aparna Mathur, "A Spatial Model of Corporate Tax Incidence," American Enterprise Institute, December 1, 2010, https://www.aei.org/wp-content/uploads/2011/10/-a-spatial-model-of-corporate-tax-incidence_105326418078.pdf; Robert Carroll, "The Corporate Income Tax and Workers' Wages: New Evidence from the 50 States," Tax Foundation *Special Report* No. 169, August 3, 2009, https://taxfoundation.org/corporate-income-tax-and-workers-wages-new-evidence-50-states/; Desai Mihir, Fritz Foley, and James Hines, "Labor and Capital Shares of the Corporate Tax Burden: International Evidence," December 2007, http://piketty.pse.ens.fr/files/Desaietal2007.pdf; and "Why Do Workers Bear a Significant Share of the Corporate Income Tax?" in Jason J. Fichtner and Jacob M. Feldman, "The Hidden Cost of Federal Tax Policy," 2015, https://www.mercatus.org/system/files/Fichtner-Hidden-Cost-ch4-web.pdf. For a contrary view, see Kimberly A. Clausing, "In Search of Corporate Tax Incidence," *Tax Law Review*, Vol. 65, No. 3 (2012), pp. 433–472, http://ssrn.com/abstract=1974217.

[55]It requires extreme, implausible assumptions about elasticities of demand for, or supply of, factors for this not to be the case. Alan J. Auerbach, "Who Bears the Corporate Tax? A Review of What We Know," National Bureau of Economic Research *Working Paper* No. 11686, October 2005, http://www.nber.org/papers/w11686.pdf; William M. Gentry, "A Review of the Evidence on the Incidence of the Corporate Income Tax," Department of the Treasury, Office of Tax Analysis, *OTA Paper* No. 101, December 2007, https://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/WP-101.pdf; and Stephen J. Entin, "Tax Incidence, Tax Burden, and Tax Shifting: Who Really Pays The Tax?" Heritage Foundation *Center for Data Analysis Report* No. 04–12, November 5, 2004, http://s3.amazonaws.com/thf_media/2004/pdf/cda04-12.pdf.

[56]In a competitive market, capital will flow from jurisdictions with a relatively low expected after-tax return to jurisdictions with a relatively high expected after-tax return until the expected after-tax returns are equal. Social and legal barriers reduce labor mobility relative to capital mobility. Gentry, "A Review of the Evidence on the Incidence of the Corporate Income Tax"; William C. Randolph, "International Burdens of the Corporate Income Tax," Congressional Budget Office *Working Paper* 2006–09, August 2006, https://cbo.gov/sites/default/files/cbofiles/ftpdocs/75xx/doc7503/2006-09.pdf; and R. Alison Felix, "Passing the Burden: Corporate Tax Incidence in Open Economies," Federal Reserve Bank of Kansas City, October 2007, https://www.kansascityfed.org/Publicat/RegionalRWP/RRWP07-01.pdf.

[57]Ibid.

[58]As opposed to non-corporate capital and customers.

Sincerely,

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